

## **The Best Breakfast in Town Project**

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*This online supplement includes sample assignments for each stage of the project as well as a rubric for grading the final assignment.*

In the Best Breakfast in Town project, students develop their skills in methodology while finding an answer to the question of where to find the best breakfast in town. By the end of this project, students will have developed a research project from the ground up and apply their research methods skills to an explicitly non-political question.

Project Learning Outcomes:

1. Identify the fundamental components, approaches, methods, and common practices of scientific social research.
2. Evaluate the quality of scientific and non-scientific research claims and distinguish between the two, with a special attention to claims in the “real world”.
3. Articulate the process of crafting an excellent research design and paper.
4. Justify theses and conclusions through the use and analysis of evidence.
5. Craft a research design or paper to explore a social problem, carry out the design, and evaluate the resulting data.

### **Assignment One: Defining the research question**

In preparation for class discussion, generate at least two possible subjects for our class project. Possible options might include breakfast, coffee shops, museums, or parks, but think creatively. Be prepared to discuss these options and vote on them in our next class session.

*Note: a good time saver is to have students propose topics and debate them in an online forum.*

### **Assignment Two: Literature Review**

Before we can start our own project to determine the Best Breakfast in Town, we need to follow scientific convention and principles and see what others have already discovered on the subject. To that end, you are charged with using an appropriate searching method to track down the ‘literature’ such as it exists, on this topic. You must find at least five sources on this subject, using the guiding questions below. The sources do NOT have to be scholarly for this project, but the more methodological they are (in terms of including information about how they determined their criteria) the more useful they will be. The focus should be on tracking down sources that will help us understand how others have studied this and similar questions in the past.

General questions you must answer:

- a) First, explain the process you used to find your sources. How did you search for the literature? Be transparent—explain exactly what you did (including search terms, if relevant) so that I could replicate your findings. And try to employ some of the methods we learned in class for finding information.

b) why was your search method an appropriate one for this task?

Then, for each source you find, you need to:

a) write a full citation in APA style;

b) annotate the source with a short and succinct summary of its main contribution to our study (that is, what take-home point should we take from the source that will help us do our own study?) See below for some suggested questions to guide your annotations, but you do NOT need to answer all of these questions.

c) Additionally, for ONE of your chosen sources, you should write an abstract of no more than 300 words, according to the guidelines in the text.

Some guiding questions to help you find sources and do your annotations, but you are not bound by this list in any way.

To find sources:

- a. Have others studied breakfast in our town? If so, who was crowned the winner/top picks?
- b. Are there studies of breakfast establishments from outside the city? Maybe a regional, national, or international discussion? This can be useful to get ideas on research design, criteria for evaluation, etc.
- c. Are there studies of other similar establishments from within the area that might help us define the boundaries of 'town' or the criteria used for evaluation? For example, maybe there are studies of the best food trucks or ice cream, and from those you could determine how they defined 'town' or how they compared places to each other.

Possible questions for the annotations:

- a. What was their research design? Was it a survey, and if so, was it done online, by phone, by mail? How were participants selected? Did they instead send out a team to evaluate all possible establishments of X? How then did they choose where to go? In other words, what procedures did they follow to come to their conclusions?
- b. How did they evaluate different establishments of breakfast? What criteria did they use to compare one place to another?
- c. What criteria did they use to decide that a certain place qualified as a breakfast spot? How did we know an breakfast place when we saw one? Were any restaurants excluded for a particular reason, and if so, what was that reason?
- d. How did they define 'town'? What kind of boundary did they use for the area they covered? What rationale if any was offered for defining town in this way?

### **Assignment Three: Research Design**

Review the lecture and reading on research designs, and come prepared to discuss in class the best research design to use for this project.

*Note: again, this assignment may be best completed via an online discussion.*

#### **Assignment Four: Ethics**

Using the reading and lectures on ethics in research, answer the following questions:

1. What kinds of ethical concerns might be raised by a project intending to determine the best breakfast in town? To what extent does our particular research design add to or mitigate these concerns?
2. Will we need to complete an application to the Institutional Review Board for this project? Why or why not?

*Note: if an IRB is required, this assignment could be replaced with one where the students actually complete an application. Divide up the various sections of the application to pairs or small groups as homework.*

#### **Assignment Five: Measurement**

*Note: Divide the students into three groups, one for each term. They will stay in these groups for the next few assignments.*

Each of you has been assigned to a group working on defining and operationalization either 'best' 'breakfast' or 'town. For your assigned term:

1. Draft a conceptual definition.
2. Draft an operationalization of your term, based on your conceptual definition. How might we define this term in a way that it can be observed?

Each group should work in their discussion space online to come to an agreement. Come to class with your proposed definitions, and be prepared to do a short presentation where you offer your definitions and explain your reasoning, with particular attention to the reliability and validity of your proposal. In class you will respond to questions and critiques from your classmates. Immediately following these presentations you will have the opportunity to revise your definitions in response to the feedback.

*Note: alternatively, skip the presentations and have each group submit their proposed definitions to another group, who revises them in consultation with the original group. Ask groups to submit the revised definitions online so you have a copy.*

#### **Assignment 6A: Population Sampling Frames**

Come to class prepared to suggest at least one sampling frame (see lecture and readings) that we can use to determine the full population of restaurants in our study. Each group will choose a sampling frame and apply it to determine a complete list of breakfast places in town, using our approved operational definitions for both 'breakfast' and 'town'. Each group is responsible for posting that complete list in the designated online discussion board with the name of the restaurant, its phone number, website, and physical address. Only one member of each group should post, but you must clearly indicate all members

of the group and the assigned sampling frame at the top of your post. 75 out of the 200 points will be scored as a group. Initial posts are due by 5pm Friday. Everyone (not just the initial poster) should review the initial posts and see where there are discrepancies--either restaurants included that should not be, or ones that are missing. The other 125 points will be awarded according to two criteria: your participation in tracking down these discrepancies and helping to build a final list, and the existence of a final population list that everyone agrees on by Tuesday at 9am.

So out of 200 points:

75 points possible for your group's initial posting of the population list according to your assigned sampling frame by 5pm Friday

75 points possible for your individual effort in resolving discrepancies, all of which should be posted on this discussion thread.

50 points possible for the entire class if there is a final definitive list posted to the discussion thread (NOT something i have to cobble together from individual posts) of a population for us to use for our study.

### **Assignment 6B: Sampling**

Answer the following questions in the online assignment, and be prepared to share your answers in class.

1. Should we study the entire population or a sample? Why?
2. If we sample, how big should that sample be? In your answer, pay particular attention to the tradeoff between representativeness and resources. By this I mean that the more restaurants in the sample, the more places each student will have to go to, particularly if you decide that each place must be visited by more than one student.
3. If we sample, what sampling method would you recommend, and why?
4. Using your suggested sample size and method, draw a sample from the population of restaurants in our study.

*Note: following this assignment, compare student responses to see if there is general agreement on whether and how to sample. Continue discussion if they disagree, otherwise settle on a method to sample. Draw the actual sample (if necessary) in class.*

### **Assignment 7: Survey Design**

Each group must prepare a list of survey questions or items that will allow us to fully evaluate the assigned criteria. This should be not less than five questions and no more than 10 per criteria. Questions must ensure full content validity and follow all the rules (in lecture and reading) for good questions and survey items. Remember, we can only analyze whatever we collect data on, and we want to make sure we have enough precise data so you will be able to answer our research question.

In our next class you will swap questions with another Criteria group and offer constructive suggestions, additions, and deletions. You will then propose a revised set of questions to the entire group. A small team made up of one member of each criteria group will be tasked with producing a finalized

questionnaire, and will make it available online.

### **Assignment 8: Procedures**

*Please post your answers to these questions in the designated online discussion board:*

What procedures should everyone have to follow when evaluating breakfast restaurants?

Specifically:

-How many visits should each restaurant receive?

-Should everyone have to go alone, or can friends or project classmates go at the same time? If others can go, should there be limits on whether there is collaboration prior to filling out the survey?

-Should there be any requirements about what people must order? Such requirements can be related to food items, drinks, cost, etc. Be sure to set a total as well as a per-restaurant budget.

-Are you allowed to ask any questions of employees or other guests?

-Are there any other requirements or restrictions on how we should proceed with our visits?

We will vote at the start of our next class on any nominate procedures. Final procedures will be listed in the final class questionnaire.

### **Assignment 9: Assignment and Data Gathering**

In class, randomly assign students to restaurants as per the decisions made in Assignment 8. Students have two weeks to go to their assigned restaurants, following all procedures, and filling out one survey per restaurant. It is a good idea to give them at least one class session to do this, which is why I always teach the course in the morning.

### **Assignment 10: Coding and Data Entry**

As homework, use the Google spreadsheet in Canvas to enter the data from your share of the surveys (handed out in class). Use the codebook in the first tab to make sure you are entering all data correctly.

*Note: this can get complicated, so I typically have a research assistant or work study enter the data in a spreadsheet I prepare.*

*Following the coding and data entry, students will work on their final papers.*

### **Assignment 11: Final Paper and Evaluation**

**Final Paper:** In your final course paper, you will review the literature and analyze the data on our Best Breakfast in Town project and provide a critique of our research process. This project is designed to help

you learn core concepts and processes of research methodology through carrying out a project you will design from the ground up. By the time you finish your paper, you will have designed and carried out a project from start to finish, worked as part of a research team, conducted individual quantitative analysis, and perhaps most importantly, have a great idea on where to go for a decent breakfast.

There are two main questions that you need to explicitly answer in your final paper:

1. According to your analysis of our data, what is the Best Breakfast in Town?
2. If you were a journal reviewer charged with evaluating our research project for its publication in a prestigious academic journal, would you vote to accept, reject, or revise and resubmit?

In the first part of your paper, you will make a case for a particular restaurant based on the data we collect and analyze during the semester. Using the skills we develop in quantitative and qualitative analysis, you will evaluate the breakfast served at these establishments, being clear both about your process and your outcome, and ultimately designate a winner. You must give a definitive winner—no ties allowed!

In the second part of your paper, you must make an editorial decision regarding our research process. You have three possible recommendations:

- Accept, which means that you will publish the piece with only very minor revisions;
- Reject, which means that the project requires many substantial and fundamental changes, rendering the results of your data analysis to little use; or
- Revise and Resubmit, which means that you think the project has hope and is fundamentally sound, but still requires major revisions. This part of your paper should evaluate all the decisions made during the homework and data collection phases and determine whether our process constitutes 'good' or 'bad science'.

This paper should be a **maximum** of 15 pages (5000 words) excluding the title page, notes, charts, tables, and bibliography and should follow normal formatting guidelines (Times New Roman, 12 pt. font, 1" margins, normal character spacing, no giant headings/title pages, APA citation and bibliographical style). It must be submitted to canvas by the start of class on the deadline. The paper is worth 25% of your final grade. See below for more information about the paper assignment.

**The Decision:** During class on the day of the deadline, you will come to class with your winner and be prepared to defend your choice using the results from your data analysis. As a class we will compare our findings and collectively determine the Best Breakfast in Town.

### PAPER GUIDELINES

Your final paper should be written in third-person prose (not as a bullet pointed response) in the style of a research paper/report (see text and student samples). It must contain the following:

- Title page with 300-word maximum abstract along with your name, paper title, and date.

**PART ONE: The Best Breakfast in Town**

- Introduction that includes:
  - Thesis that tells me the answer to the research question
  - Research question
  - Road map to the rest of the paper
- Literature Review of at least 6 sources relevant to our project (best to use the list provided)
- Methodology section
  - Class-determined conceptual and operational definitions of Best, Breakfast, and Town
  - How are you measuring criteria for best (what variables you used and why; discussion of the validity of those measures.
  - Changes/transformations to the data you made
  - How you are analyzing the data—what method you are using, and the exact procedures you followed.
- Results section
  - Should lay out the results of carrying out your methodology—how did members of the sample fare according to your criteria? Must include at least one table and one chart (can be moved to an appendix if needed)
- Conclusion
- Bibliography in APA style

**PART TWO: Editorial Decision**

- Should be a separate section of 2-3 pages after the conclusion of the paper. Should have a clearly different voice from the previous section, written from the perspective of an editor assessing the first part of the paper.
- Indicates your critique of the research process (any aspect of it, such as measurement, population finding, sample method, questionnaire, data analysis, etc.). This should be given as an explanation for your thesis, which is the editorial decision.
- Indicates an editorial decision justified by the critique:
  - Accept—means that the project needs no more than minor changes in order to be worthy of publication
  - Revise and Resubmit—there are substantial issues with the project, but they are fixable in a timely manner
  - Reject—the project is fundamentally flawed and cannot be fixed without a complete redo

**Best Breakfast in Town Final Project Grading Rubric**

Student Name:

Grading Criteria	Points Possible	Points Earned	Comments
<b>Introduction and Literature Review</b>			
Clear research question	50		

<i>Appropriate to our study</i>			
Clear thesis <i>must indicates a clear answer to the research question</i>	50		
Introduction that sets tone for the paper with road map	50		
Literature Review of at least 6 sources <i>Synthesizes the six sources to draw conclusions and common themes; does not read as a simple summary or annotation of each source.</i>	300		
<b>Methods Section</b>			
Definitions <i>Details the correct conceptual and operational definitions of Best, Breakfast, and Town (properly cited)</i>	75		
Measurement of Criteria <i>Clearly indicates how they measure the criteria for best, noting what variables they used to represent the full range of criteria.</i>	150		
Validity <i>Explanation of why these variables are valid measures of the criteria.</i>	150		
Changes to the Data <i>Notes any changes/transformations to the data that were made; such changes are logical and valid ways of handling issues; or discusses why changes not necessary</i>	100		
Procedures of Analysis <i>Discusses the planned analysis procedures; such procedures are sound.</i>	150		
<b>Results section</b>			
Application of Procedures <i>Clearly indicates how the methodological procedures from the methods section were applied. Procedures should be in line with the tools of descriptive statistics and be clear in how they produce the answer outlined in the thesis.</i>	300		
Presentation of Results <i>Results of analysis are clearly indicated, including at least one chart or table that summarizes the results of the analysis. Graphic should be complete, and follow guidelines (titled, labeled columns or axis, etc.).</i>	300		
<b>Editorial Decision</b>			
Editorial Decision <i>Clearly indicates whether the project should be accepted, rejected, or revised by the journal</i>	50		
Critique and Defense <i>Indicates a thoughtful critique of the project grounded in the principles of methods with clear evidence for the editorial decision.</i>	400		
<b>Conclusion and Other Items</b>			
Conclusion <i>Clearly summarizes the paper; can potentially include recommendations for future research or other recommendations.</i>	50		
Title page with 300 word max abstract	50		
Citations <i>All borrowed information was correctly cited in APA style</i>	50		

Complete Bibliography in APA style	75		
Normal Formatting, 15 pages/5000 words of text	50		
Writing Style <i>Writing is clear of major spelling/grammatical errors</i>	100		
Totals	2500		
Grade			